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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/726,093 10/04/96 FUCHS

W SYF-116 (7783)

HM12/1123

EXAMINER

TESTA HURWITZ AND THIBEAULT
PATENT ADMINISTRATOR
HIGH STREET TOWER
125 HIGH STREET
BOSTON MA 02110

MARECHAL, A

ART UNIT	PAPER NUMBER
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1655

DATE MAILED:

11/23/99

25

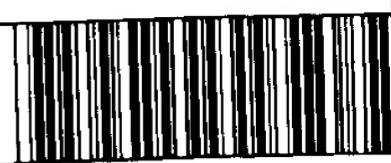
Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/726,093	Applicant(s)
Examiner Ardin Marschel	Group Art Unit 1655

Fuchs et al.



Responsive to communication(s) filed on Sep 1, 1999

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

Claim(s) 32-51, 54-62, and 64-74 is/are pending in the application.
~~Specification~~, Claim(s) 1-31, 52, 53, and 63 have been canceled. ~~Specification~~ is/are allowed.
 Claim(s) 58-62 and 64-71 is/are rejected.
 Claim(s) 32-37, 39-51, 55, 56, and 72-74 is/are objected to.
 Claim(s) 38, 54, and 57 are subject to restriction or election requirement.
 Claims _____

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
 The drawing(s) filed on _____ is/are objected to by the Examiner.
 The proposed drawing correction, filed on _____ is approved disapproved.
 The specification is objected to by the Examiner.
 The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 All Some* None of the CERTIFIED copies of the priority documents have been received.
 received in Application No. (Series Code/Serial Number) _____
 received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892
 Information Disclosure Statement(s), PTO-1449, Paper No(s). (1 sheet)
 Interview Summary, PTO-413
 Notice of Draftsperson's Patent Drawing Review, PTO-948
 Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1655.

Applicants' arguments, filed 9/1/99, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C.

103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 32-37, 39-51, 55, 56, and 72-74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rose taken in view of Chen et al. (Ref. CN) . , taken further in view of Nielsen et al. (P/N 5,539,082) .

This rejection is reiterated and maintained from the previous office action, mailed 4/30/99, and as necessitated by amendment regarding newly added claims. Applicants firstly argue that Rose does not teach the formation of complexes of at least 50 nucleotides. This is non-persuasive because the rejection is based on the above combination of references and not Rose alone. Nielsen et al. was previously noted as suggesting complex formation that exceed 50 nucleotides in length. Applicants then argue that denaturation of the nucleic acid duplex was not described in the references. This has been responded to previously in that PNA hybridization must be preceded by nucleic acid duplex denaturation as required both in practice of the references as well in the instant claims. Applicants then argue that the reference denaturation is directed to both the PNA and nucleic acid complexes. This distinction is neither found in the instant claims nor in the references and therefore is moot in overcoming the rejection. Applicants then argue that Nielsen et al. does not describe separation of PNA complexes, a medium that is denaturing to such complexes etc. These arguments are non-persuasive in overcoming the rejection because Nielsen et al. is not relied on for these limitations, therefore the absence of

them in Nielsen et al. while they are indeed present in the other references continues to support the rejection. Lastly, applicants argue that instant claims 44 and 45 are not suggested by the references due to the "multiple PNA sequences" limitations therein. This is also non-persuasive because this limitation in claims 44 and 45 does not require "different" PNAs for multiplex practice but is deemed inclusive of multiple PNAs of the same type due to a lack of such a "different" probe type limitation.

Claims 38, 54, and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 58-62 and 64-71 are allowed.

Applicants' amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61

(November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)305-3014 or (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

November 19, 1999

Ardin H. Marschel
ARDIN H. MARSCHEL
PRIMARY EXAMINER